

INTERNATIONAL PRELIMINARY EXAMINATION REPORT



(PCT Article 36 and Rule 70)

Applicant's or agent's file reference BCS 02-4003	FOR FURTHER ACTION See Notification of Transmittal of International Preliminary Examination Report (Form PCT/PEA/416)	
International application No. PCT/EP 03/13340	International filing date (day/month/year) 24.10.2003	Priority date (day/month/year) 25.10.2002
International Patent Classification (IPC) or both national classification and IPC C07C209/74		
Applicant BAYER CROPSCIENCE S.A. et al.		

- This international preliminary examination report has been prepared by this International Preliminary Examining Authority and is transmitted to the applicant according to Article 36.
- This REPORT consists of a total of 4 sheets, including this cover sheet.
 - ☐ This report is also accompanied by ANNEXES, i.e. sheets of the description, claims and/or drawings which have been amended and are the basis for this report and/or sheets containing rectifications made before this Authority (see Rule 70.16 and Section 607 of the Administrative Instructions under the PCT).

These annexes consist of a total of sheets.

- This report contains indications relating to the following items:
 - I ☒ Basis of the opinion
 - II ☐ Priority
 - III ☐ Non-establishment of opinion with regard to novelty, inventive step and industrial applicability
 - IV ☐ Lack of unity of invention
 - V ☒ Reasoned statement under Rule 66.2(a)(ii) with regard to novelty, inventive step or industrial applicability; citations and explanations supporting such statement
 - VI ☐ Certain documents cited
 - VII ☐ Certain defects in the international application
 - VIII ☐ Certain observations on the international application

Date of submission of the demand 18.05.2004	Date of completion of this report 03.01.2005
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**INTERNATIONAL PRELIMINARY
EXAMINATION REPORT**

International application No. PCT/EP 03/13340

I. Basis of the report

1. With regard to the **elements** of the international application (*Replacement sheets which have been furnished to the receiving Office in response to an invitation under Article 14 are referred to in this report as "originally filed" and are not annexed to this report since they do not contain amendments (Rules 70.16 and 70.17)*):

Description, Pages

1-5 as originally filed

Claims, Numbers

1-10 as originally filed

2. With regard to the **language**, all the elements marked above were available or furnished to this Authority in the language in which the international application was filed, unless otherwise indicated under this item.

These elements were available or furnished to this Authority in the following language: , which is:

- ☐ the language of a translation furnished for the purposes of the international search (under Rule 23.1(b)).
☐ the language of publication of the international application (under Rule 48.3(b)).
☐ the language of a translation furnished for the purposes of international preliminary examination (under Rule 55.2 and/or 55.3).

3. With regard to any **nucleotide and/or amino acid sequence** disclosed in the international application; the international preliminary examination was carried out on the basis of the sequence listing:

- ☐ contained in the international application in written form.
☐ filed together with the international application in computer readable form.
☐ furnished subsequently to this Authority in written form.
☐ furnished subsequently to this Authority in computer readable form.
☐ The statement that the subsequently furnished written sequence listing does not go beyond the disclosure in the international application as filed has been furnished.
☐ The statement that the information recorded in computer readable form is identical to the written sequence listing has been furnished.

4. The amendments have resulted in the cancellation of:

- ☐ the description, pages:
☐ the claims, Nos.:
☐ the drawings, sheets:

5. ☐ This report has been established as if (some of) the amendments had not been made, since they have been considered to go beyond the disclosure as filed (Rule 70.2(c)).

(Any replacement sheet containing such amendments must be referred to under item 1 and annexed to this report.)

6. Additional observations, if necessary:

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**V. Reasoned statement under Article 35(2) with regard to novelty, inventive step or industrial applicability;
citations and explanations supporting such statement**

1. Statement

Novelty (N)	Yes: Claims	
	No: Claims	1,2,5,6,8,9
Inventive step (IS)	Yes: Claims	
	No: Claims	1-10
Industrial applicability (IA)	Yes: Claims	1-10
	No: Claims	

2. Citations and explanations

see separate sheet

**INTERNATIONAL PRELIMINARY
EXAMINATION REPORT - SEPARATE SHEET**

International application No. PCT/EP 03/13340

Re Item V

**Reasoned statement with regard to novelty, inventive step or industrial applicability;
citations and explanations supporting such statement**

In this communication, reference is made to D1 (WO-A-01/6462301), cited in the search report.

The present application does not meet the criteria of Article 33(2) PCT.

D1 discloses (see p.8, essai no. 3) a process for the preparation of 2,6-dichlorotrifluoromethylaniline by reacting the para-trifluoroaniline (pTFA) with Cl_2 , which are added to the reaction solvent simultaneously (see p.4, lines 16-18), into monochlorobenzene/HF solvent in a Cl_2 /pTFA molar ratio of 2.2 at a temperature of 110°C. Thus, D1 seems to anticipate the novelty of claims 1,2,5,6,8,9 on file.

The present application does not meet the criteria of Article 33(1) PCT, because the subject-matter of claims 1-10 does not involve an inventive step in the sense of Article 33(3) PCT.

D1 is regarded as being the closest prior art.

The problem to be solved by the present invention is the provision of a process for producing of 2,6-dihalotrifluoromethylaniline.

The solution proposed in the application, is a process which consists of reacting p-TFA with X_2 (X =halogen) in a polar aprotic solvent, wherein p-TFA and X_2 are added simultaneously to the solvent, in a X_2 /pTFA molar ratio ranging from 1.9 to 2.5 at a temperature of between 100°C and 300°C.

The solution is already known from D1 (see above novelty objection). The general teaching of D1 is directed to preparing 2,6-dichlorotrifluoromethylaniline in the presence of HF diluted in a solvent. The solvent is one which facilitates the chlorination by Cl^+ e.g. chlorinated aromatic solvents, e.g. mono-, di-, tri-chlorobenzene (see p.3, lines 15-20). For higher yields, the temperature should be higher than 100°C (see p.3, lines 28-30).

It follows that in view of D1, the claimed matter 1-10 cannot be regarded as inventive.